FILE NO. Entered in NID File Checked by Chief Location Map Pinned Approval Letter Card Indexed Disapproval Letter COMPLETION DATA: Date Well Completed 9-12-76 Location Inspected Bond released OW: ... W. ... TA.... State or Fee Land GW.... OS.... PA... LOGS FILED Driller's Log.... Electric Logs (No.) E..... I...... Dual I Lat..... GR-N.... Micro.... BMC Sonic GR..... Lat..... Mi-L.... Sonic..... CBLog. CCLog. Others.

CHARLES H. MARTIN Box 1267 Littleton, Colorado 80120

303-794-7292

July 21, 1976

State of Utah Department of Natural Resources Division of Oil, Gas, and Mining 1588 West North Temple Salt Lake City, Utah 84116

Attention: Mr. Cleon B. Feight, Director

Re: Houston Oil and Minerals Corp

Application for Permit to Drill

Federal 11-6 Federal 23-29

Dear Mr. Feight:

Enclosed are two (2) copies each, of Federal Form #9-331 C for the following wells:

Houston Oil and Minerals Corp.
Lease no. U-29591
Castle Creek Prospect
Well no. Federal 11-6
Location: NW NW Sec. 6-T39S-14E

Houston Oil and Minerals Corp. Lease no. U-29607 Steer Gulch Prospect Well no. Federal 23-29 Location: NE SW Sec. 29-T38S-R16E

It was a pleasure to talk with you and I really appreciate your verbal go-ahead on our Castle Creek Prospect. Hope to visit your office someday.

Very truly yours,

C. H. Martin

CHM:cem

cc Houston Oil and Minerals

Form 9-331 C "(May 1963)

SUBMIT IN TRIPLIC **UNITED STATES**

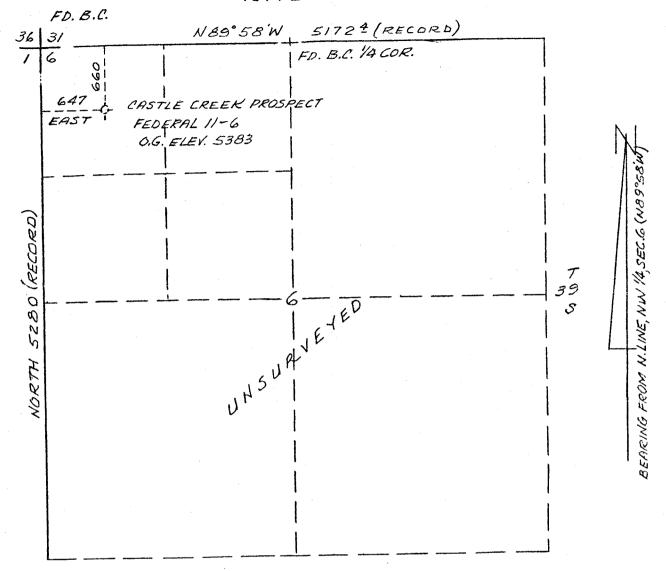
(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

n. Nati	DEPARTMENT	OF	THE	INTE	RIOF
	GEOLOG	ICA	L SUR	VEY	

_					
5.	LEASE	DESIGNATION	AND	SERIAL	NO.

1.0		0				J. LEASE DESIGNATION AND SERIAL
	GEOLO	GICAL SURV	EY			<u>U-29591</u>
APPLICATION	V FOR PERMIT 1	O DRILL,	DEEP	EN, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TRIBE NA
1a. TYPE OF WORK		· · · · · · · · · · · · · · · · · · ·				
DRI	LL X	DEEPEN		PLUG BAC	CK 🗌	7. UNIT AGREEMENT NAME
b. TYPE OF WELL	AS [. 9	INGLE MULTIP	r.m. ()	
WELL X W	ELL OTHER			ONE ZONE	<u> </u>	8. FARM OR LEASE NAME
2. NAME OF OPERATOR				Da d		Federal /
<u> </u>	Oil and Minera	-			ren 🔾	9. WELL NO.
5. ADDRESS OF OPERATOR			•	10 200	(// 🕃	11-6 //
1700 B1	coadway Suite Seport location clearly and	004 Denver	Co	80203/V 29	976	1
At surface	77 THE CONTRACT	S C		1 30 6 1	0/2	Wildcat /11. SEC., T., R., M., OR BLK.
0.	THE COURNE (of Sec. 6 1	395-	R14E	e 🖂	AND SURVEY OR AREA
At proposed prod. zon	<i> </i>	Mas Co			~(°5/	Sec. 6-T39S-14E $^{\nu}$
14. DISTANCE IN MILES	Same // W	EST TOWN OR POS	T OFFIC	· Vains		12. COUNTY OR PARISH 13. STATE
						San Juan Utal
15. DISTANCE FROM PROPO		· 	16. N	O. OF ACRES IN LEASE		F ACRES ASSIGNED
PROPERTY OR LEASE L	INE, FT.	547	2	536	TO T	HIS WELL ACT
(Also to nearest drlg 18. DISTANCE FROM PROP	OSED LOCATION*			COPOSED DEPTH	20. ROTAL	RY OR CABLE TOOLS
TO NEAREST WELL, DE OR APPLIED FOR, ON THE		•	7	150	Rota	ry
21. BLEVATIONS (Show whe	ether DF, RT, GR, etc.)				•	22. APPROX. DATE WORK WILL STA
	GLE 5383					August 1076
23.	P	ROPOSED CASI	IG AN	CEMENTING PROGRA	м	
					1	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	OOT	SETTING DEPTH	<u> </u>	QUANTITY OF CEMENT
17½	13 3/8	48		150		200
121/4	9 5/8	32.3		1500		150
8 3/4-7 7/8	5½	14-15.5-17	'	7150	to co	over prod. zones
	•					
Set 13 3/5	R conductor ci	rc cement	ine	tall ROP drill	to an	prox. 1500' with nati
						ble-hydraulic Ram Type
						e test to 1000 psi.
						for State of Utah and
	be followed.					
Drill to a	approx. 7150° TI), using ai	ror	foam, if possi	ble, or	r low solids chem-gel
						from surface to total
						evaluate any potentia
productive	e zones.					
		•				
						uctive zone and proposed new produ I and true vertical depths. Give blo
reventer program, if any		ny, give pertinent	. uata t	n subsulface locations an	u measureu	and title vertical depths. Give bio
4.				\sim		
SIGNED	M DONA		LE Z	ala cu	A.	7-12-76
			1.B			DATE 1 22 1 V
(This space for Feder	ral or State office use)				•	
PERMIT NO. 45-C	37-30301	<u> </u>		APPROVAL DATE	·	
7						
APPROVED BY		TIT	LE			DATE
CONDITIONS OF APPROV	AL, IF ANY:			:		



WELL LOCATION PLAT

CASTLE CREEK PROSPECT-FEDERAL 11-6
IN NWY4 NW 14, SECTIONG, T395, R14E, S.L.B. & M.

SAN JUAN COUNTY, LITAH

SCALE: I"= 1000' MAY 25, 1976

FOR: HOUSTON OIL & MINERALS CORP.

TRANSIT & DISTANCE METER SURVEY

ELEV. BY VERT. ANGLES FROM V.ABM. MOK!",

(5994) U.S.G.S. QUAD. "CLAY HILLS, UTAH" 1954

Stin E. Keagh UTAH REGOOLS. Nº 1963

FILE NOTATIONS

Date:	14 30 1	976
Operator:	Houston Oll	of Minerals Corp.
Well No:	Federal 11-	· .
Location: Sec.	. 6 T.375 R./4	1E County: Sam Joan
File Prepared Card Indexed		Entered on N.I.D. Completion Sheet
Remai	etive Assistant: X	eman of Po
Reman Director: Reman	7	
Include Within	Approval Letter:	
Bond Requi	ired	Survey Plat Required
Order No.		Blowout Prevention Equipment
Rule C-3(c) Topographical except within a 660' radius	cion/company owns or controls acreage of proposed site
O.K. Rule	e C-3	0.K. In Unit
Other:		Letter Written

July 30, 1976

Houston Oil & Minerals Corporation 1700 Broadway Suite 504 Denver, Colorado 80203

> Re: Well No. Federal 11-6 Sec. 6, T. 39 S, R. 14 E, San Juan County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer HOME: 582-7247 OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed

whether or not water sands (aquifers) are encountered during drilling.

The API number assigned to this well is 43-037-30301.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT DIRECTOR

CBF:sw

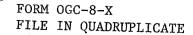
cc: U.S. Geological Survey

STATE OF UTAH DIVISION OF OIL & GAS CONSERVATION DEPARTMENT OF NATURAL RESOURCES

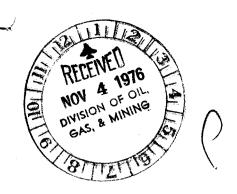
PETROLEUM ENGINEER. MINE COORDINATOR———ADMINISTRATIVE ASSISTANT

PLUGGING

NAME OF COMPANY HOUSTON OIL & MIN	ERALS
WELL NAME Castle Creek Federal	11-6 API NO: 43-031-303
Sec. 6 Township 39 S Range 14	E County <u>San Juan</u>
Verbal Approval Given to Plug the Abo	ove Referred to Well in the Following Manner:
Total Depth: 6243'	
Casing Program: 13 3/8" @ 147'	Formation Tops: Navajo - Surface Chinle - 580'
9 5/8" @ 1658.91' 7" @ 4426'	Cutler - 1580' Cedar Mesa - 2090'
	Hermosa - 3460' Molas - 4930' Mississippian - 5150' Devonian - 5710'
Plugs Set as Follows:	Cambrian - 6070'
5650 - 5750' 5100 - 5200' 4375 - 4475' Cut off 7", place plug 50' in and 50' 1600 - 1700' (bottom of 9 5/8") 50' Cut off 9 5/8", place plug 50' in and 15 sack plug on top, with marker NO SHOWS OF OIL, GAS OR FRESH WAY TONIGHT Program approved	in and 50' out d 50' out NATER, NO DST'S RUN OR CORES: RUNNING E-LOGS
Pate: September 23, 1976	signed: Scher William



STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING 1588 West North Temple Salt Lake City, Utah 84116



REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name and Number	H.O.M. Castle Creek Federal 11-6	
Operator Houston Oi.	l and Minerals Corporation	
Address 1700 1	Broadway - Suite 504, Denver, Colorado 8	30290
Contractor Loffland	d Brothers	
Address Farm	mington, New Mexico	*
Location <u>NW</u> 1/4, <u>NW</u> 1	1/4, Sec. 6; T. 39 N; R. 14 E; Sa	n Juan County
Water Sands: Depth: From- To-	Volume: Flow Rate or Head-	Quality: Fresh or salty-
1. 4455-80	30 gal/hr. (est 300 psi)	Fresh
2. 4929-30	200 gal/hr. (est 350 psi)	(Chlorides: 1400 ppm) Brackish
3.		(Chlorides: 2000 ppm)
4 .		
5.		
	(continue on reverse side	if necessary)

Formation Tops:

NOTE: (a)

- Upon diminishing supply of forms, please inform this office.
- Report on this form as provided for in Rule C-20, General Rules (b) And Regulations and Rules of Practice and Procedure.
- If a water quality analysis has been made of the above reported (c) zone, please forward a copy along with this form.



CALVIN L. RAMPTON Governor

GORDON E. HARMSTON Executive Director, NATURAL RESOURCES

> **CLEON B. FEIGHT** Director ...

OIL, GAS, AND MINING BOARD

GUY N. CARDON Chairman

CHARLES R. HENDERSON **ROBERT R. NORMAN** I. DANIEL STEWART HYRUM L. LEE

Clearic logs run: 9/23/76

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING 1588 West North Temple Salt Lake City, Utah 84116 (801) 533-5771

December 30, 1976

Houston Oil & Minerals Corp. 1700 Broadway, Suite 504 Denver, Colorado 80290

> Re: Well No. Federal 11-6 Sec. 6, T. 398, R. 14E San Juan County, Utah

Gentlemen:

This letter is to advise you that the "Well Completion or Recompletion Report and Log" and electric and or radioactivity logs for the above referred to well are due and have not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3 in duplicate, and forward them to this office as soon as possible. If electric and or radioactivity logs were not run, please make a statement to this effect in order that we may keep our records accurate and complete.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER RECORDS CLERK CALVIN L. RAMPTON Governor

OIL, GAS, AND MINING BOARD

GUY N. CARDON

Chairman

GORDON E. HARMSTON Executive Director. NATURAL RESOURCES

> CLEON B. FEIGHT Director

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES **DIVISION OF OIL, GAS, AND MINING**

1588 West North Temple Salt Lake City, Utah 84116 (801) 533-5771

March 22, 1977

CHARLES R. HENDERSON **ROBERT R. NORMAN** I. DANIEL STEWART **HYRUM L. LEE**

Houston Oil & Minerals Corporation 1700 Broadway, Suite 504 Denver, Colorado 80290

Cledic sop view: Re: Well No. Federal 11-6 Sec. 6, T. 398, R. 14E

San Juan County, Utah

Gentlemen:

This letter is to advise you that the "Well Completion or Recompletion Report and Log" and electric and or radioactivity logs for the above referred to well are due and have not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGC-3 in duplicate, and forward them to this office as soon as possible. If electric and or radioactivity logs were not run, please make a statement to this effect in order that we may keep our records accurate and complete.

Your prompt attention to the above will be greatly appreciated.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

KATHY OSTLER RECORDS CLERK



HOUSTON OIL MINERALS CORPORATION

March 29, 1977

State of Utah Division of Oil, Gas & Mining 1588 West North Temple Salt Lake City, Utah 84116

re: Federal 12-7 Asphalt Ridge

SW NW Sec. 7-T4S-R20E Uintah County, Utah

Attention: Mr. Pat Driscoll

Gentlemen:

Enclosed is a copy of the "Well Completion or Recompletion Report and Log" for the above mentioned well. Also enclosed are the logs run for this well; the DIL, BHC/Sonic, Amplitude Variable Density and the Compensated Neutron Density.

If there are any additional questions or requirements, please do not hesitate to contact this office.

Respectfully yours,

Ronald D. Scott

Division Drilling Engineer

RDS/qs **Enclosures**

Form approved.

3	•		OIA	TIED	SIAIES			(See othe	arin-	J	Budget E	Bureau No. 42–R355.5
**	DE	PART	MEI	NT OF	F THE IN	ITERIO	R	struction reverse s	s on 5	EASE DE	SIGNATI	ON AND SERIAL NO
					LSURVE			reverse s	side /	U-29	591	
WELL CO	MPLE	TION	OR	RECON	APLETION	REPORT	AND	LOG*	6. 1	F INDIAN	, ALLOT	TEE OR TRIBE NAM
1a. TYPE OF WE	LL:	011.	П	GAS	DRY X				7. J	NIT AGR	EEMENT	NAME
b. TYPE OF COM	ארט בישורי	WELL	لــا	WELL	J DRY [21]	Other	75	101111	_ '' "			
NEW WELL	work (DEEP-	- 🗀	PLUG BACK	DIFF. DESVR.	Other		<u> </u>	8. F	ARM OR	LEASE :	NAME
2. NAME OF OPERA							\nearrow	17 Prince		Fede	ral	
Houston	Oil a	and Mir	iera:	ls Corp	poration		Dur	AR SEIVE	7/ 9. w	ELL NO.		
3. ADDRESS OF OPE	RATOR		• , ,	-04 -	enver, Col	, 5	64°	ON 0 19	>> -	11-6		
4. LOCATION OF WE	oadway	7 - Su	te :	004, De	enver, Col	orado Par	2024 d	MINIO	139.	FIELD AN Wild		OR WILDCAT
4. LOCATION OF WE At surface	LL (Repor	rt location	cleart	y and in a	ecoruance with a	iny State Read	rements	We '	A 111			R BLOCK AND SURVEY
				Sectio	on 6, T39S	, R14E 🖔				OR AREA		
At top prod. in		orted belo	W		A A		2			Sec.	6-39	9S - 14E
Sam At total depth	е											
sam	e				14. PERMIT N	0.	DATE I			COUNTY PARISH	OR	13. STATE
						:		17-76		ı Juan		Utah
15. DATE SPUDDED	1			17. DATE	COMPL. (Ready	to prod.) 1	8. ELEVA	ATIONS (DF, R		ETC.)*	19. E	
8-3-76 20. TOTAL DEPTH, MD		21 21 21 21		D., MD & T	N/A	LTIPLE COMPI		GLE 53		ARY TOO	LS	N/A CABLE TOOLS
6243'	2 115	21. 1200,	N/A			MANY		DRILLED	BY	yes	1	
24. PRODUCING INTE	RVAL(S),	OF THIS C			BOTTOM, NAME	(MD AND TVD)	*				25.	WAS DIRECTIONAL SURVEY MADE
A7	/A			ø								No
26. TYPE ELECTRIC		R LOGS RU	'N			*					27. WA	S WELL CORED
. D.	IL/LL8	, BHC/	'Soni	c, Dip	meter							No
28.				CASIN	NG RECORD (Re	eport all string	78 set in	well)				
CASING SIZE	WEIG	HT, LB./F7	r.	DEPTH SET	(MD) H	OLE SIZE		CEMENT	ring RECOR	D		AMOUNT PULLED
22"		-		40'		<i>30</i> "		100	SX			None
13-3/8'		48.0	1	148'		17½"		190	SX			None
9-5/8'		32.3		1659'		12¼"	_	175	SX			760'
7"		23.0	<u>'</u>	4426'		8-3/4			SX			3657 '
29.				RECORD		1		30.	1	G RECO		
SIZE	TOP (X	(D)	BOTTOM	(MD)	SACKS CEMENT*	SCREEN (2	4D)	SIZE	DEPTH	SET (M	D)	PACKER SET (MD)
N/A						_		·	-			
31. PERFORATION RE	CORD (Int	erval, size	and n	umber)		32.	ACII	D, SHOT, FR	ACTURE.	CEMEN	r SOUE	EZE. ETC.
N/A						DEPTH IN						ATERIAL USED
,						4426-8	30 '		1000 ga	ls 15	5% HC	'L
												<u> </u>
33.* DATE FIRST PRODUCT	708	PRODUC	TION M	PTHOD (F)	PRO owing, gas lift,	DUCTION	and tue	ne of numa)		1 1001	9'17'17'	(Producing or
	10	1 nobec	110.0	LINOD (II	owing, gas tijt,	pumping one	ana vyp	oc o, pamp,		8hu	t-in)	
N/A	HOURS	TESTED	СНО	KE SIZE	PROD'N. FOR	OIL-BBL.		GAS-MCF.	WAT	ER-BBL		& Abandoned
					TEST PERIOD							
FLOW. TUBING PRESS.	CASING	PRESSURE		CULATED IOUR RATE	OIL—BBL.	GAS-	-MCF.	WA'	TER—BBL.		OIL GRA	AVITY-API (CORR.)
34. DISPOSITION OF G	18 (8013	used for 4.	-	ted etc.)	1				Lanes	WITNES	C\$0 50	
or, pracoarrion of G	as (DUIU)	ween jor ji	.c., (t/l	, =10.)					ILST	011.728	ומ עפט	

35. LIST OF ATTACHMENTS

Duplicate set of all logs run

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

Drilling Engineer

DATE 10-8-76

INSTRUCTIONS

This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Hem 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State

Hem 18: Indicate which devation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Hems 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producting interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval.

Hem 29: "Such; Concut": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Hem 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

100 100	-			THE LATER OF TENED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES	i i		
580 2090 Shale 2090 3470 Sandstone 3470 4923 Polomite, Limestone, Sandstone, Shale 4923 5092 Shale, Lime cobbles 5700 Limestones, Dolomites 6110 TD Limestone	FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.		TO	P
ian 5092 3470 4923 4923 5092 5092 5700 6110 TD	Chinle	580	209Ù	م <i>ا</i> دری	MANIE	MEAS. DEPTH	TRUE VERT. DEPTH
3470 4923 4923 5092 ippian 5092 5700 n 5700 6110 n 6110 TD	Ceder Mesa	2090	3470	Sandstone			
4923 5092 5092 5700 5700 6110 6110 TD	Hermosa	3470	4923	Polomite, Limestone, Sandstone, Shale			
5092 5700 6110 TD	Molas	4923	5092	Shale, Lime cobbles			
5700 6110 6110 TD	Mississippian	5092	5700	Limestones, Dolomites			
6110 TD	Deuonian	5700	0119	Limestones, Dolomites			
	Cambrian	0119	TD	Limestone		11 -va.n	
			1				
			-				

★ U.S. GOVERNMENT PRINTING OFFICE: 1974-780-680/VIII-238





OIL, GAS, AND MINING BOARD

GUY N. CARDON
Chairman

CHARLES R. HENDERSON ROBERT R. NORMAN JAMES P. COWLEY HYRUM L. LEE

GORDON E. HARMSTON Executive Director, NATURAL RESOURCES

CLEON B. FEIGHT

Director

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116
(801) 533-5771
April 14, 1977

Houston Oil & Minerals Corporation 1700 Broadway, Suite 504 Denver, Colorado 80290

> Re: Well No. FEDERAL 11-6 Sec. 6, T. 39S, R. 14E

San Juan County, Utah

Gentleman:

This letter is to advise you that the electric and or radioactivity logs for the above referred to well are due and have not been filed with this office as required by our rules and regulations.

If electric and or radioactivity logs were not run on said well, please make a statement to this effect in order that our records may be kept accurate and complete.

Thank you for your cooperation relative to the above.

Very truly yours,

DIVISION OF OIL, GAS AND MINING

KATHY OSTLER RECORDS CLERK